



Marine & Offshore

Certificate number: 23741/B0 BV

File number: AP 4203

Product code: 4206I

This certificate is not valid when presented without the full attached schedule composed of 7 sections

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TYPE APPROVAL CERTIFICATE

This certificate is issued to

Zenitel Norway A/S

Horten - NORWAY

for the type of product

PUBLIC ADDRESS AND GENERAL ALARM SYSTEMS

Public Address and General Alarm System

SPA-V2 System

Requirements:

BUREAU VERITAS Rules for the Classification of Steel Ships

SOLAS 74 as amended Reg. III/6, LSA Code, IMO MSC/Circ. 808, IMO Res. A.1021(26), IEC 60945:2002

This certificate is issued to attest that Bureau Veritas Marine & Offshore did undertake the relevant approval procedures for the product identified above which was found to comply with the relevant requirements mentioned above.

This certificate will expire on: 16 Jan 2023

For Bureau Veritas Marine & Offshore,

At BV OSLO, on 16 Jan 2018,

Rune MARSTEIN

Rune Marstein



This certificate remains valid until the date stated above, unless cancelled or revoked, provided the conditions indicated in the subsequent page(s) are complied with and the product remains satisfactory in service. This certificate will not be valid if the applicant makes any changes or modifications to the approved product, which have not been notified to, and agreed in writing with Bureau Veritas Marine & Offshore. Should the specified regulations or standards be amended during the validity of this certificate, the product(s) is/are to be re-approved prior to it/they being placed on board vessels to which the amended regulations or standards apply. This certificate is issued within the scope of the General Conditions of Bureau Veritas Marine & Offshore available on the internet site www.veristar.com. Any Person not a party to the contract pursuant to which this document is delivered may not assert a claim against Bureau Veritas Marine & Offshore for any liability arising out of errors or omissions which may be contained in said document, or for errors of judgement, fault or negligence committed by personnel of the Society or of its Agents in establishment or issuance of this document, and in connection with any activities for which it may provide.

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BV Mod. Ad.E 530 June 2017

This certificate consists of 3 page(s)

THE SCHEDULE OF APPROVAL

1. PRODUCT DESCRIPTION:

SPA-V2 System is a Public Address and General Alarm System comprising the following modules:

1.1 - Hardware:

Model / Series	Description
SPA PA 19" RACK	Racks Series with heights from 12U to 24U
SPA-TERM-V2	Terminal Board
SPA-MUL-xx	Multizone Boards Series
SPA-CHIME-V2	Generator Board
SPA-VDR-V2	VDR Board
SPA-EMS-V2	Emergency Speech Board
SPA-REL-xx / SPA-AL-REL-xx	Relays Board / Alarm Relays Board Series
SPA-EE3-V2 / SPA-DUALAL-V2	Tone Generator Boards
SPA-FAIL	Power Supply Failure Board
DR-4524	Power Supply Unit
SPA-M1-V2	PA Panel Single f/ all call, dimmer, flush, without mic
SPA-M1-D	PA Panel Dual f/ all call, dimmer, flush, without mic
SPA-M6-V2	PA Panel Single W/6 zones ,all call, dim, flush, without mic
SPA-M6-D	PA Panel Dual W/6 zones,all call, dim, flush, without mic
SPA-Wxx	Watertight Microphone Panels Series
SPA-ACx	Alarm Panels Series
MB-30G	Gooseneck Microphone for ETB, CTB, SPA-V2
ETC-1-TB	Hand Microphone w/ 5-pin DIN plug for ETB, CTB, SPA-Mx-V2/-D
P-66	Watertight Microphone
VPA-120, VPA-240 and VPA-400	Amplifiers

Power Supply: 230 VAC / 50 Hz + 24 VDC

1.2 - Software:

Board	Software Version
SPA EE3	V3.07
SPA-M6SD	V1.01
SPA-CHIME-V2	V1.00

Note: Functions of other Boards are DIP-Switches controlled.

2. DOCUMENTS AND DRAWINGS:

ZENITEL:

Manuals:

- Public Address and General Alarm System, SPA-V2, System Manual Doc. No. A100K10369
- Public Address and General Alarm System, SPA-V2, Installation & Configuration Manual Doc. No. A100K10370
- Public Address and General Alarm System, SPA-V2, User Manual Doc. No. A100K10371.

Data Sheets:

3005010079 SPA-120-V2, 3005010084 SPA-240-V2, 3005010087 SPA-400-V2, 3005010095 SPA-AC-6, 3005010096 SPA-AC6-D, 3005010195 SPA-W1AR-D, 3005010196 SPA-W1AR-V2, 3005010197 SPA-W1-D, 3005010199 SPA-W1-V2, 3005010203 SPA-W6A4-D, 3005010202 SPA-W6A4-V2, 3005010235 VPA-120, 3005010237 VPA-240, 3005010239 VPA-400, 2340110019 SPA-M1-D, 2340110020 SPA-M6-V2, 2340110021 SPA-M6-D, 3005010150 SPA-M1-V2, 3005020033 MB-30G, 3005020029 ETC-1-TB, 3005020039 P-66.

3. TEST REPORTS:

From **DELTA:**

- Test for Marine Type Approval of SPA-V2 System, Test Report No. DANAK-1911533 dated 19 August 2011
- Type Approval testing of VPA-120, VPA-240 & VPA-400 PA/GA system power amplifiers, Test Report No. DANAK-198453 dated 28 July 2006.

From **ZENITEL:**

- Performance Test DNV PA/GA Type Approval of SPA-V2 system, Doc. Ver. 1.4 dated 2008-04-20 (witnessed on 2008.05.06).

4. APPLICATION / LIMITATION:



- 4.1 - BUREAU VERITAS Rules for the Classification of Steel Ships.
- 4.2 - Approval valid for ships intended to be granted with the following additional class notations: **AUT-UMS, AUT-CCS, AUT-PORT and AUT-IMS.**
- 4.3 - The equipment fulfils the EMC requirements for installation on the Bridge and deck Zone.
- 4.4 - BUREAU VERITAS Environmental Category, **EC Code: 21.**
- 4.5 - Each application and configuration is to be submitted to the Society's examination prior to fitting on board.
- 4.6 - The equipment, once installed on board ship, is to be tested in accordance with the above referred Regulations under the supervision of a Society's Surveyor.
- 4.7 - Only Hardware and Software successfully tested together in compliance with the regulations as referred to in page one, according to the declaration of the manufacturer are covered by this certificate.
- 4.8 - Factory Acceptance and On-board Tests are to be performed in accordance with requirements for Category II Equipment.

5. PRODUCTION SURVEY REQUIREMENTS:

- 5.1 - The above products are to be supplied by **Zenitel Norway A/S** in compliance with the type and the requirements described in this certificate.
- 5.2 - This type of product is within the category IBV of Bureau Veritas Rule Note NR320.
- 5.3 - BV product certificate is required.
- 5.4 - **Zenitel Norway A/S** has declared to Bureau Veritas the following production site:

Zenitel Norway A/S
P.Box 1068
3194 Horten
NORWAY

6. MARKING OF PRODUCT:

- 6.1 - According to IEC / EN 60945.
- 6.2 -  or  conformity marking, as relevant.

7. OTHERS:

- 7.1 - It is **Zenitel Norway A/S's** responsibility to inform shipbuilders or their sub-contractors of the proper methods of fitting, use and general maintenance of the approved equipment and the conditions of this approval.
- 7.2 - This certificate supersedes the Type Approval Certificate No. 23741/A0 BV issued on 12-Oct-2012 by the Society.

*** END OF CERTIFICATE ***

